User Manual

Thank you for purchasing Keyking products. Please read this manual thoroughly before using.

FPC2000 Biometric Standalone

KEYKING GROUP LIMITED

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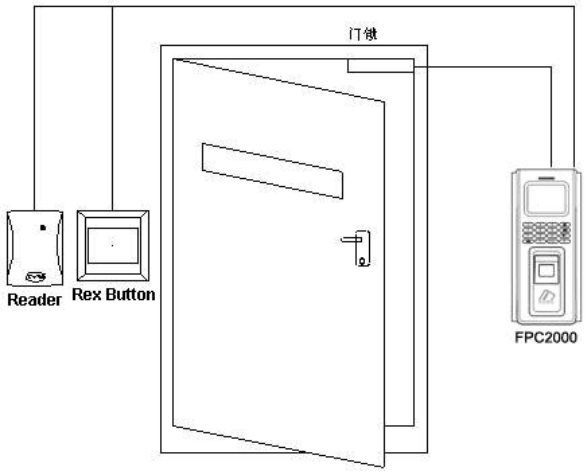
Chapter 1 Introduction

1.1 Summary

FPC2000 is a new outstanding biometric standalone controller with TFT color display developed by KEYKING. When FPC2000 works as T&A controller, employees need to press their finger on the reader(which has to be authorized) to complete attendance. The TFT screen will display time and staff ID info. This system greatly improved the T&A simplicity and offered cost saving on traditional tags. When FPC2000 works as an access controller, the traditional key is no longer needed, employees can enter their special space by flashing authorized cards. FPC2000 can by itself control a door, both in and out, at least one reader is needed for one side, and the other side can be controlled either by a reader or a Rex Button. This system provides a more convenient and secured access environment, it also makes it possible for managers to verify the attendance in time. FPC2000 is compatible with a big range of applications including, building management, enterprise management, government, military and prison.

FPC2000 Appearance



FPC2000 Diagram

Model Definition:

FPC2000/E------ Built in EM Card Reader

FPC2000/H----- Built in HID Card Reader；

FPC2000/U------ Built in Mifare\CPU Card Reader；

Supported Card Type:

E：EM Card； Exp EM4100， TK4100 Series.

H：HID Card； Exp: 1326、1386 Series.

U：FM1208 CPU Card，Philips S50， Mifare-1 Compatible

1.2 Features

- TFT color display with elegant appearance.
- Standard Wiegand 26/34 output, compatible with Wiegand format access controller
- Dust and water resistant, suitable for wide kinds of installations.
- Quick responding, anti-interference, low power consumption and stable.
- WDT circuit, self-checking function.
- High speed of fingerprint matching, 3000 fingerprints within 1 second.
- Multithreaded code has taken full advantage of multi-core CPU
- 500dpi optical biometric sensor, scratch resistant.
- World leading fingerprint algorithm, resistant fake fingerprint.
- Support Chinese/English interface.
- Background picture and company name can be changed base on customer’s requirement.
- Display card number, user name, employee ID and etc.

Specifications

- CPU：400MHz DSP
- Memory：4MB Flash memory+8MB RAM
- Fingerprint storage：3000 pcs（expandable to 8000 pcs）
- Supported card：
  E：Proximity EM4100 series
  M：S50 compatible Mifare card or other compatible cards
- Biometric sensor：500 dpi optical biometric sensor
- Verify mode：FP, Card, Card+FP, ID+FP
- Communication interfaces：Wiegand output, TCP/IP communicate
- Working voltage：12VDC
- Working current ≤200mA
- Standby current≤150mA
- Temperature：-20°C to 65°C
- Humidity：0--95%
- Dimension：197mm L x88mm W x 35mm
- Weight：490 g

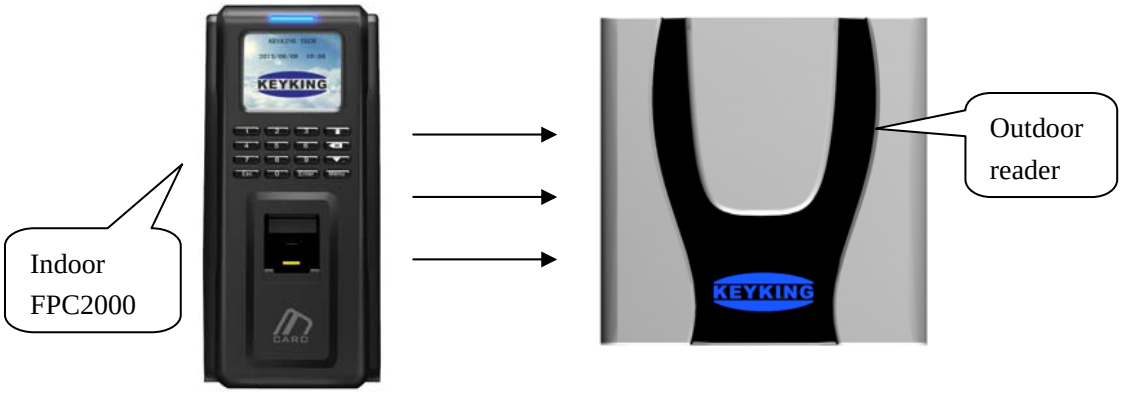
。

1.3 Application Mode

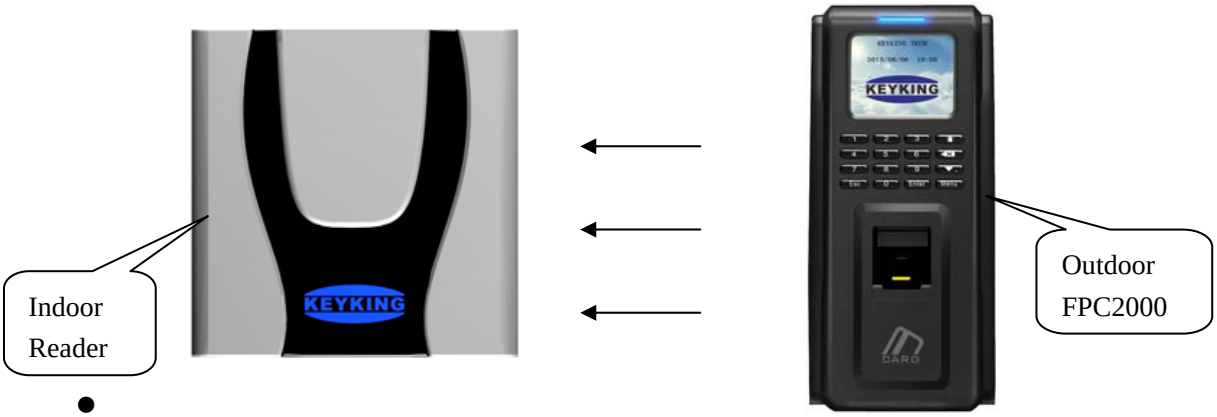
3 Application Modes：

- Standalone

- Outdoor external reader, indoor FPC2000



- Indoor external reader, outdoor FPC2000



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Chapter2 Wiring Diagram

2.1 FPC2000 Appearance

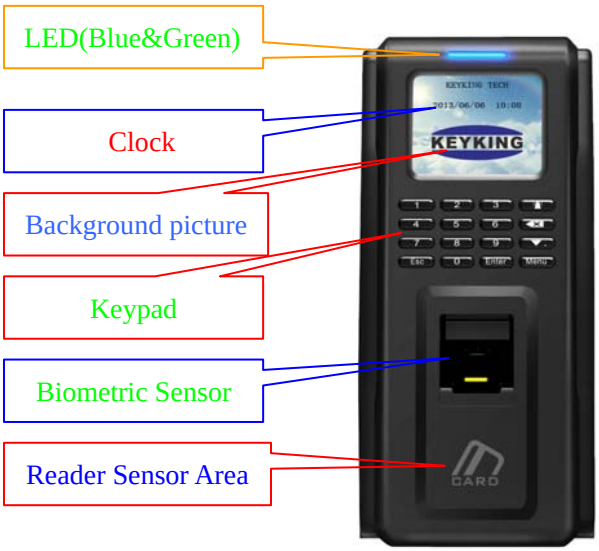


Figure 2-1

LED:

- Blue LED：Power indicator
- Green LED：Sensor indicator（Relay on indicator）

Keypad:

NO.	Key	Description	NO.	Key	Description
1	1	Numeral 1	9	9	Numeral 9
2	2	Numeral 2	10	0	Numeral 0
3	3	Numeral 3	11	Esc	Exit
4	4	Numeral 4	12		Door bell
5	5	Numeral 5	13		Delete
6	6	Numeral 6	14		Next/. symbol
7	7	Numeral 7	15	Menu	Menu
8	8	Numeral 8	16	Enter	Enter/Confirm

2.2 Wiring Diagram

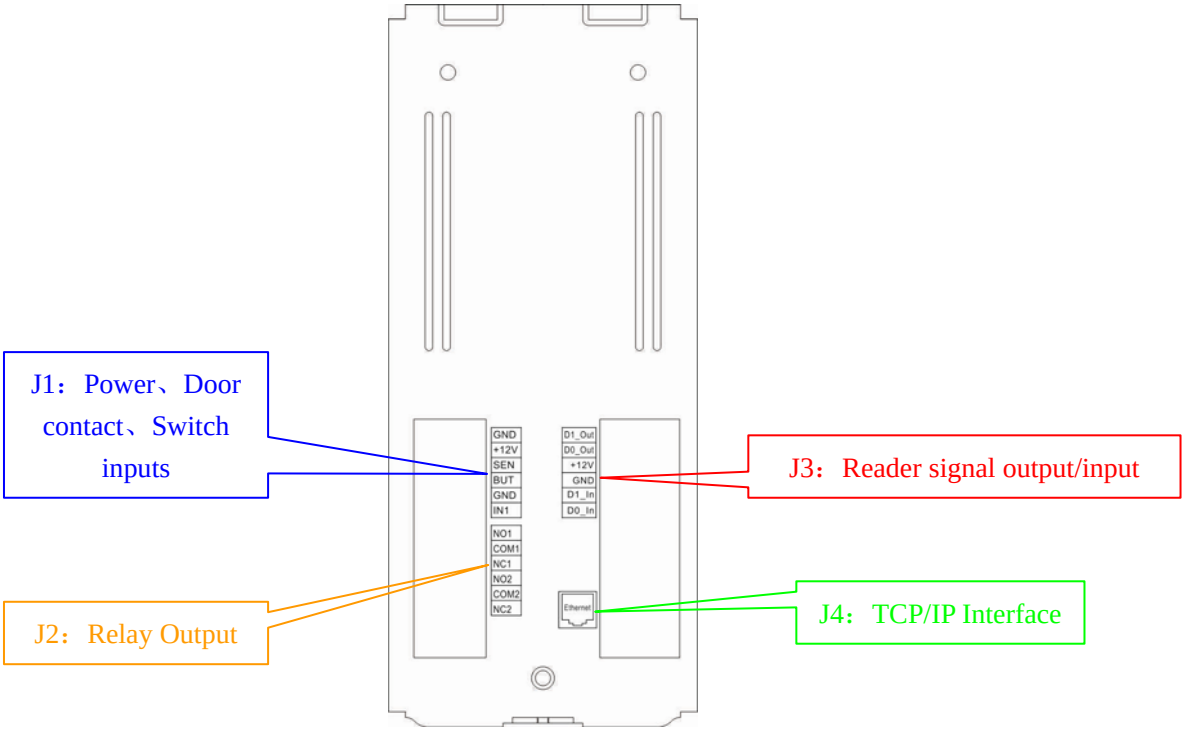


Figure 2-2 Wiring Sketch

Icon	NO	Connection	Definition	Icon	NO	Connection	Definition
J1	1	GND	Power supply Door contact, Rex Button, Auxiliary output	J3	13	D1_Out	Reader signal input/output
	2	+12V			14	D0_ Out	
	3	SEN			15	+12V	
	4	BUT			16	GND	
	5	GND			17	D1_In	
	6	IN1			18	D0_In	
J2	7	NO1	Relay output	J4	19	RJ45	TCP/IP interface
	8	COM1					
	9	NC1					
	10	NO2					
	11	COM2					
	12	NC2					

Figure 2-1

Wiring Description：

J1: Power supply, Magnetic door contact, Rex Button, Auxiliary input

- ✓ 12V：DC 12V Positive
- ✓ GND：Ground
- ✓ SEN：Door contact
- ✓ BUT：Rex Button,
- ✓ GND：Ground
- ✓ IN1：Auxiliary input

J2: Relay output

- ✓ Based on customized lock model and power requirement.

J3 Reader signal input/output

- ✓ D1_Out ： Wiegand signal output
- ✓ D0_ Out：Wiegand signal output
- ✓ +12V：DC 12V Positive
- ✓ GND：Ground
- ✓ D1_In: Wiegand signal input
- ✓ D0_In：Wiegand signal input

J4: TCP/IP interface

- ✓ Customer can set all configurations when it's connected to host PC. Moreover user authorization and exporting card events can also be done via manage software.
- ✓ To use a switch or directly connect to host PC via Ethernet port.

2.3 Lock Wiring Diagram

J4: Relay Output（Lock Control）

As shown below.

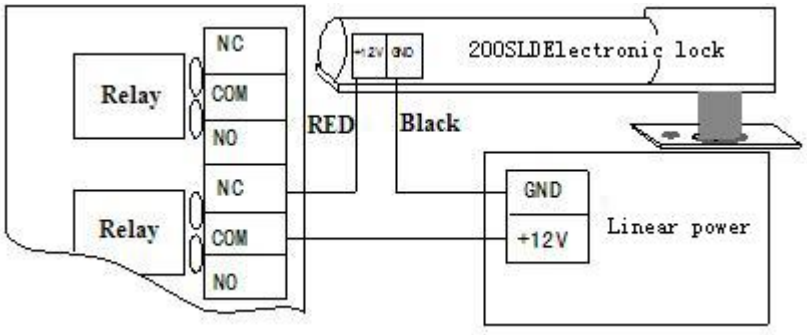


Figure 2-4 Electronic Strike Lock

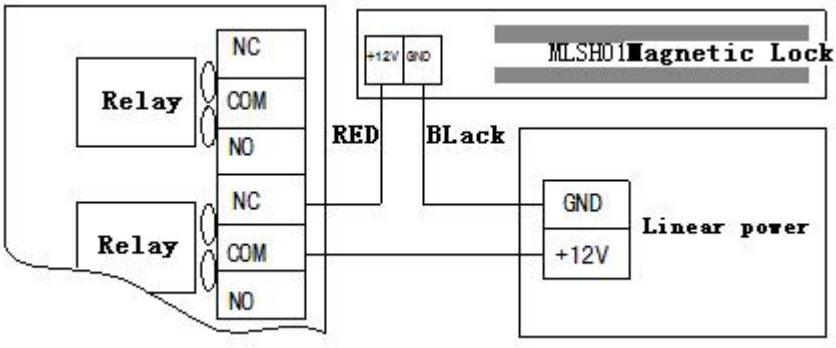


Figure 2-5 Magnetic Lock (Fail safe)

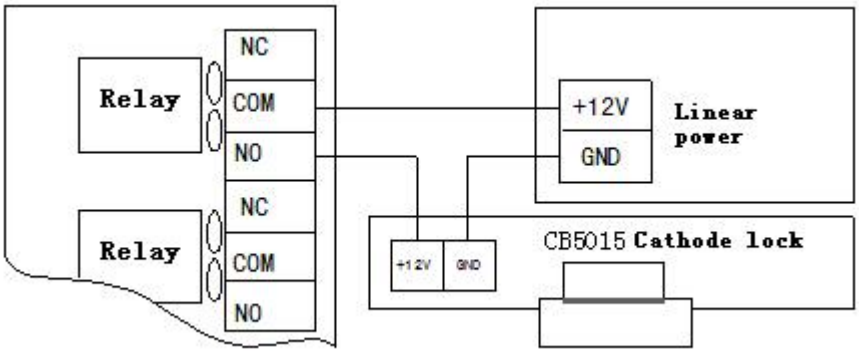


Figure 2-6 Cathode lock（Fail secure）

2.4 TCP/IP Network

FPC2000 TCP/IP network

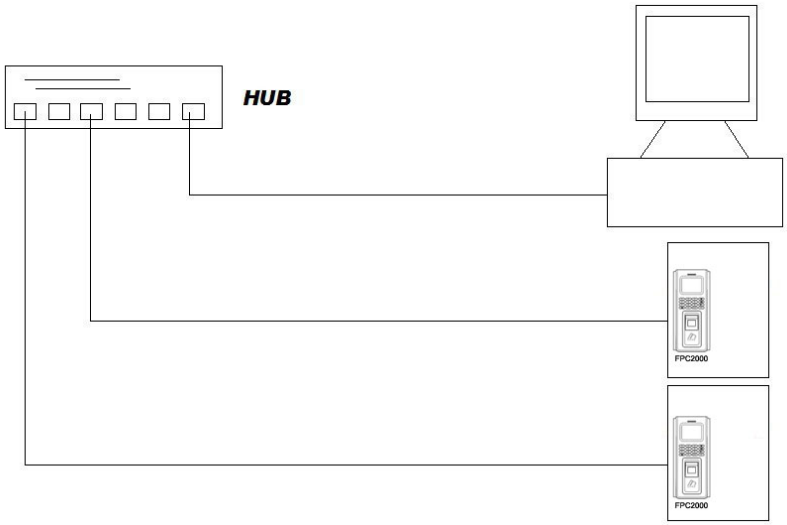


Figure 2-8

TCP/IP crystal head

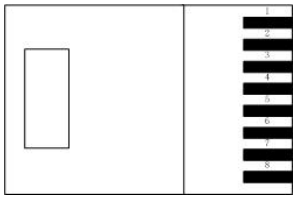


Figure 2-9

RJ45 NO.	Definition
1	TX+
2	TX-
3	RX+
6	RX-

Figure 2-2

Normal net cable（to switch）

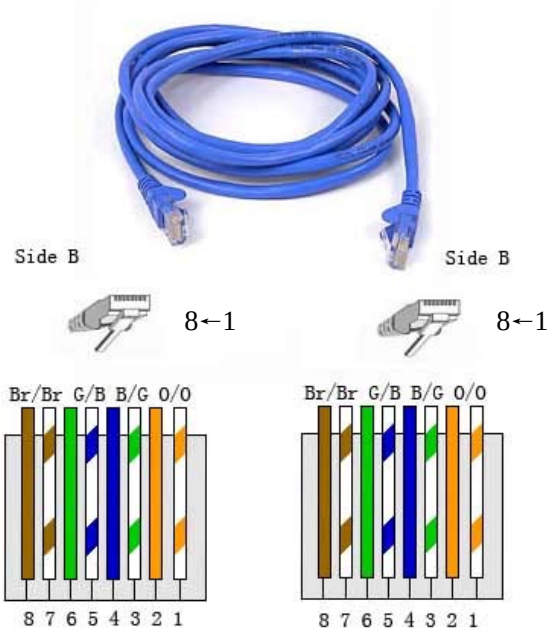


Figure 2-10

Crossed cable（to PC）

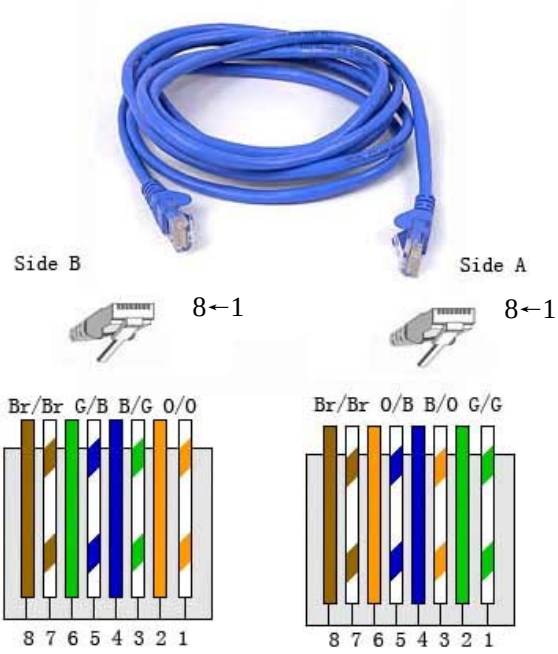
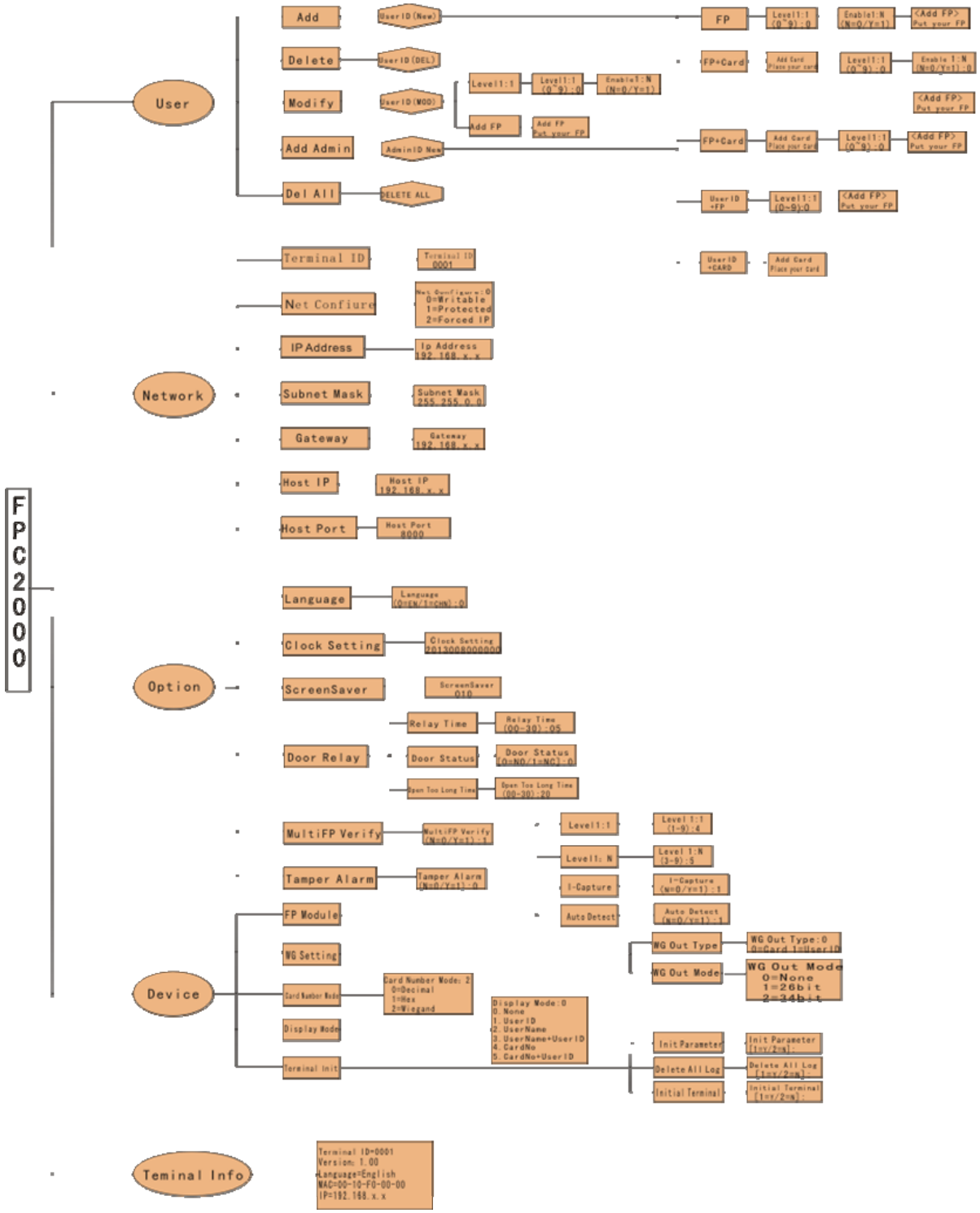


Figure 2-11

Chapter3 Instructions

User Management、PIN management、Work mode and Time set are configured in the manage menu. Menu structure is shown below.



3.1 Personnel Management

3.1.1 Add Personnel

1. Press button Menu to enter manage menu when FPC2000 is idle. In the following steps, Esc works as cancel while Enter works as confirm.

Keyking FPC2000
1. User
2. Network
3. Option
4. Device
5. Terminal Info

2. Press 1 to enter User interface. (As shown below)

Keyking FPC2000
1. Add
2. Delete
3. Modify
4. Add Admin
5. Delete All

3. Press 1 again to enter Add interface(As shown below)

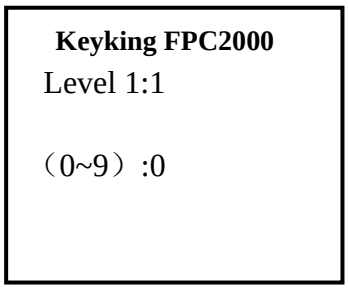
Keyking FPC2000
New ID
----

4. Input the new ID and press enter to the next interface. (As shown below)

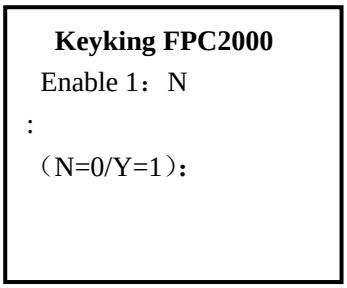
Keyking FPC2000
1. FP
2. FP/Card
3. FP+CARD
4. UserID+FP
5. User ID+card

3.1.1.1 FP

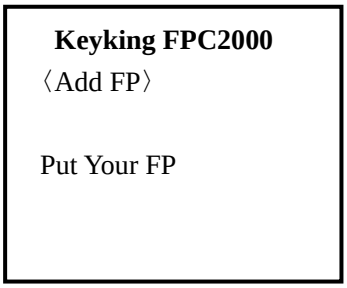
1. Press 1 to enter Add FP interface. (As shown below)



2. Select a level according to customer's requirement(High level for high matching accuracy, but will low down responding time), press Enter to enter the next interface.



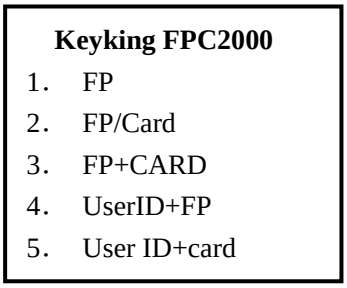
3. Press 0 to confirm that the FP is attached to the User ID, else press 1 stands for searching FP in the database. Press Enter to enter the next interface.



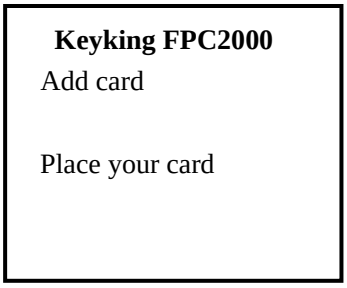
4. Put your finger right twice to finish registering. The screen will display "Add FP OK" and then go back to the main menu.

3.1.1.2 FP/Card

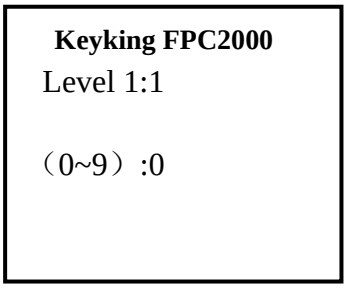
Enter the following interface referring 3.1.1.



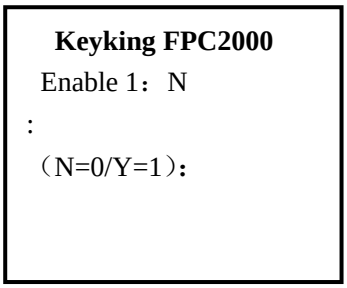
1. Press 2 to enter add FP/Card interface. (As shown below)



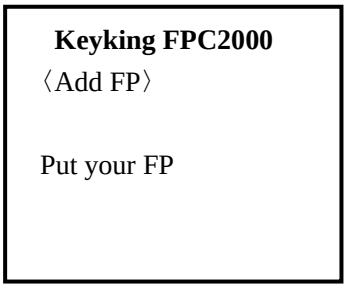
2. Place the card in the sensor area; system will enter the next interface after a beep sound.



3. Select a level according to customer's requirement(High level for high matching accuracy, but will low down responding time), press Enter to enter the next interface.



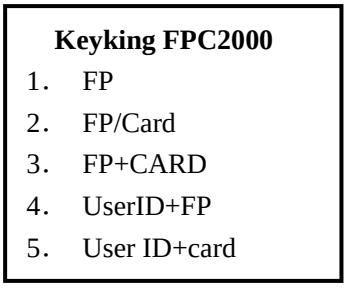
4. Press 0 to confirm that the FP is attached to the User ID, else press 1 stands for searching FP in the database. Press Enter to enter the next interface.



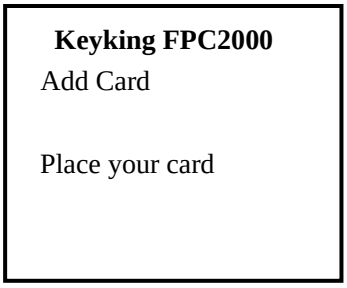
5. Put your finger right twice to finish registering. The screen will display "Add FP OK" and then go back to the main menu.

3.1.1.3 FP+Card

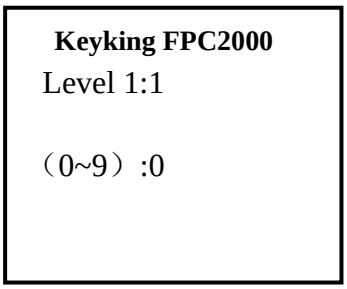
Enter the following interface referring 3.1.1.



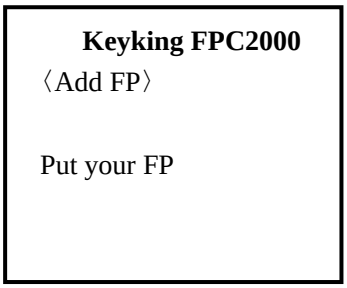
1. Press 3 to enter add FP+Card interface. (As shown below)



2. Place the card in the sensor area; system will enter the next interface after a beep sound.



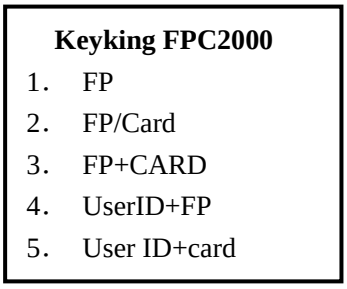
3. Select a level according to customer's requirement(High level for high matching accuracy, but will low down responding time), press Enter to enter the next interface.



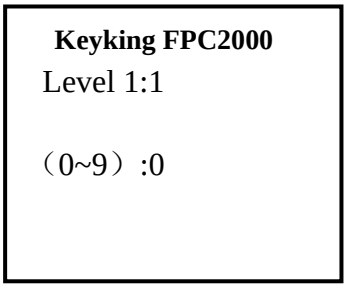
4. Put your finger right twice to finish registering. The screen will display "Add FP OK" and then go back to the main menu.

3.1.1.4 UserID+FP

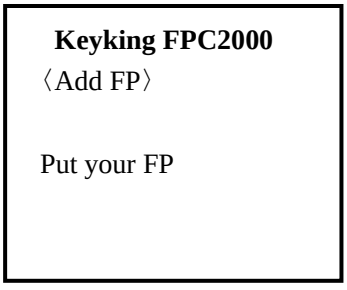
Enter the following interface referring 3.1.1.



1. Press 4 to enter add UserID+FP interface. (As shown below)



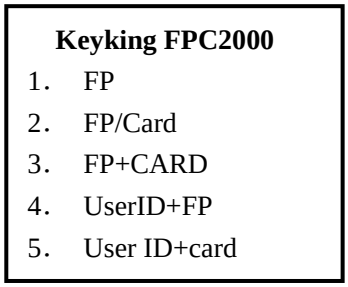
2. Select a level according to customer's requirement(High level for high matching accuracy, but will low down responding time), press Enter to enter the next interface.



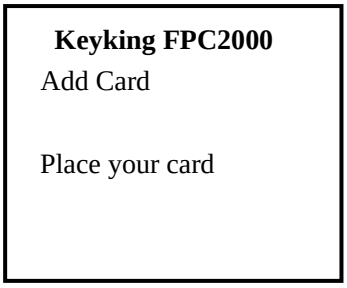
3. Put your finger right twice to finish registering. The screen will display "Add FP OK" and then go back to the main menu.

3.1.1.5 User ID+card

Enter the following interface referring 3.1.1.



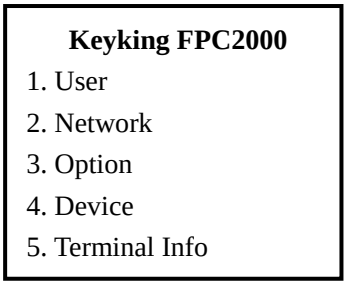
1. Press 5 to enter add UserID+Card interface. (As shown below)



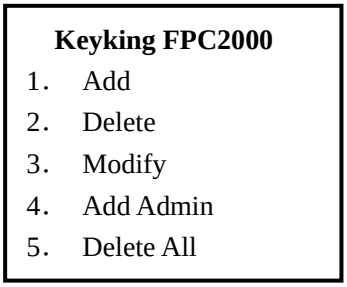
2. Place the card in the sensor area; system will enter the next interface after a beep sound.

3.1. 2 Delete Personnel

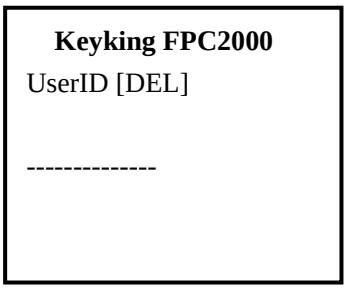
1. Press button Menu to enter manage menu when FPC2000 is idle. In the following steps, Esc works as cancel while Enter works as confirm.



2. Press 1 to enter User interface. (As shown below)



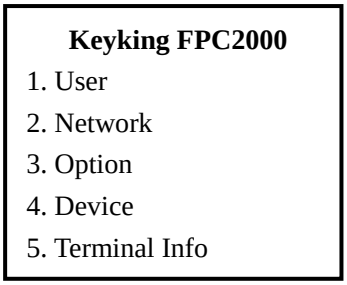
3 Press 2 to enter Delete interface.



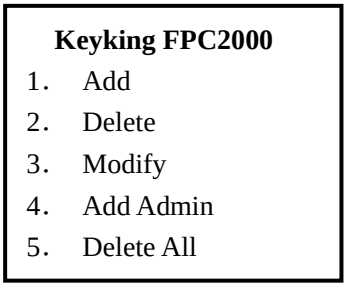
4 Input the UserID which is to be deleted, then press Enter to confirm.

3.1.3 Modify

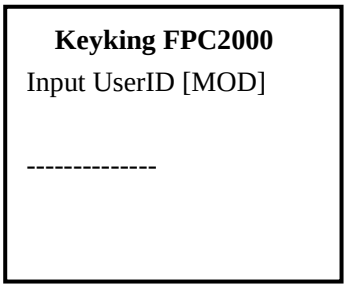
1. Press button Menu to enter manage menu when FPC2000 is idle. In the following steps, Esc works as cancel while Enter works as confirm.



2. Press 1 to enter User interface. (As shown below)



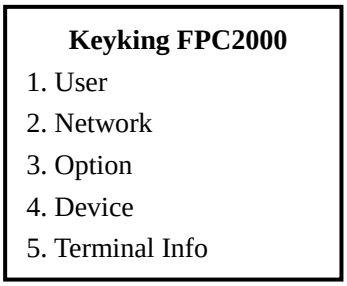
3. Press 3 to enter Modify interface.



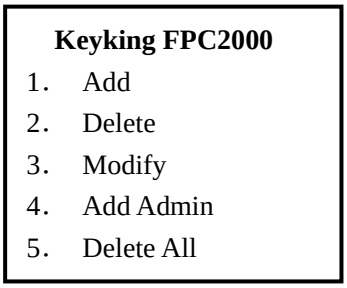
4. Input the UserID which is to be modified, customer can change configuration like level 1:1 or replace FP or card.

3.1.4 Add Admin

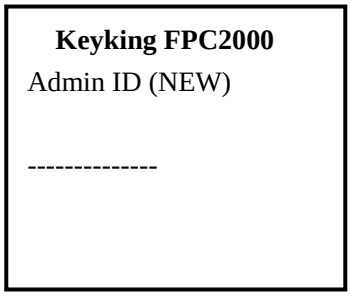
1. Press button Menu to enter manage menu when FPC2000 is idle. In the following steps, Esc works as cancel while Enter works as confirm.



2. Press 1 to enter User interface. (As shown below)



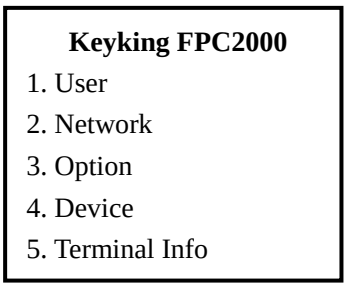
3. Press 4 to enter Add Admin interface.



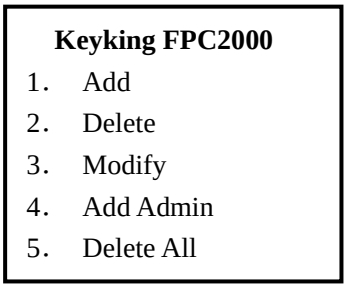
4. Input new Admin ID and press Enter to the next interface. Refer to 3.1.1.

3.1.5 Delete All

1. Press button Menu to enter manage menu when FPC2000 is idle. In the following steps, Esc works as cancel while Enter works as confirm.



2. Press 1 to enter User interface. (As shown below)



3. Press 5 to enter Delete All interface.

Keyking FPC2000
Delete all?

[Y=1/N=2]:

4. Press the corresponding number to select, press Enter to confirm deleting.

3.2 Network Configuration

3.2. 1 Terminal ID

1. Press button Menu to enter manage menu FPC2000 is idle. In the following steps, Esc works as cancel while Enter works as confirm.

Keyking FPC2000
1. User
2. Network
3. Option
4. Device
5. Terminal Info

2. Press 2 to enter Network interface. (As shown below)

Keyking FPC2000
1. Terminal ID
2. Net Configure
3. IP Address
4. Subnet Mask
5. Gateway
6. Host IP
7. Host Port

3. Press 1 to enter Terminal ID interface. (stands for delete button, stands for symbolic button)

Keyking FPC2000
〈Terminal ID〉

0001

4. Input the Terminal ID by using the keypad and press Enter to confirm.

3.2.2 Net Configure

1. Press button Menu to enter manage menu FPC2000 is idle. In the following steps, Esc works as cancel while Enter works as confirm.

Keyking FPC2000
1. User
2. Network
3. Option
4. Device
5. Terminal Info

2. Press 2 to enter Network interface. (As shown below)

Keyking FPC2000
1. Terminal ID
2. Net Configure
3. IP Address
4. Subnet Mask
5. Gateway
6. Host IP
7. Host Port

3. Press 2 to enter Net Configuration interface. (stands for delete button, stands for symbolic button)

Keyking FPC2000
Net Configure：0
0=Writable
1=Protected
2=Forced IP

4. Select a configuration and input the corresponding number, then press Enter to confirm.

3.2.3 IP Address

1. Press button Menu to enter manage menu FPC2000 is idle. In the following steps, Esc works as cancel while Enter works as confirm.

Keyking FPC2000
1. User
2. Network
3. Option
4. Device
5. Terminal Info

2. Press 2 to enter Network interface. (As shown below)

Keyking FPC2000
1. Terminal ID
2. Net Configure
3. IP Address
4. Subnet Mask
5. Gateway
6. Host IP
7. Host Port

3. Press 3 to enter IP Address interface. (stands for delete button, stands for symbolic button)

Keyking FPC2000
IP Address：

192.168.x.x

4. Input the IP address and press Enter to confirm.

3.2.4 Subnet Mask

1. Press button Menu to enter manage menu FPC2000 is idle. In the following steps, Esc works as cancel while Enter works as confirm.

Keyking FPC2000
1. User
2. Network
3. Option
4. Device
5. Terminal Info

2. Press 2 to enter Network interface. (As shown below)

Keyking FPC2000
1. Terminal ID
2. Net Configure
3. IP Address
4. Subnet Mask
5. Gateway
6. Host IP
7. Host Port

3. Press 4 to enter Subnet Mask interface. (stands for delete button,

stands for symbolic button)

Keyking FPC2000
Subnet Mask：

255.255.x.x

4. Input your Subnet Mask and press Enter to confirm.

3.2.5 Gateway

1. Press button Menu to enter manage menu FPC2000 is idle. In the following steps, Esc works as cancel while Enter works as confirm.

Keyking FPC2000
1. User
2. Network
3. Option
4. Device
5. Terminal Info

2. Press 2 to enter Network interface. (As shown below)

Keyking FPC2000
1. Terminal ID
2. Net Configure
3. IP Address
4. Subnet Mask
5. Gateway
6. Host IP
7. Host Port

3. Press 5 to enter Gateway interface. (stands for delete button, stands for symbolic button)

Keyking FPC2000
Gateway：

192.168.X.X

4. Input your Gateway and press Enter to confirm.

3.2.6 Host IP

1. Press button Menu to enter manage menu FPC2000 is idle. In the following

steps, Esc works as cancel while Enter works as confirm.

Keyking FPC2000
1. User
2. Network
3. Option
4. Device
5. Terminal Info

2. Press 2 to enter Network interface. (As shown below)

Keyking FPC2000
1. Terminal ID
2. Net Configure
3. IP Address
4. Subnet Mask
5. Gateway
6. Host IP
7. Host Port

3. Press 6 to enter Host IP interface. (stands for delete button, stands for symbolic button)

Keyking FPC2000
Host IP：

192.168.X.X

4. Input the Host IP and press Enter to confirm.

3.2.7 Host Port

1. Press button Menu to enter manage menu FPC2000 is idle. In the following steps, Esc works as cancel while Enter works as confirm.

Keyking FPC2000
1. User
2. Network
3. Option
4. Device
5. Terminal Info

2. Press 2 to enter Network interface. (As shown below)

Keyking FPC2000
1. Terminal ID
2. Net Configure
3. IP Address
4. Subnet Mask
5. Gateway
6. Host IP
7. Host Port

3. Press 7 to enter Host Port interface. (Stands for delete button, stands for symbolic button)

Keyking FPC2000
Host Port：

8000

4. Input the Host Port and press Enter to confirm.

3.3 Option

3.3.1 Language

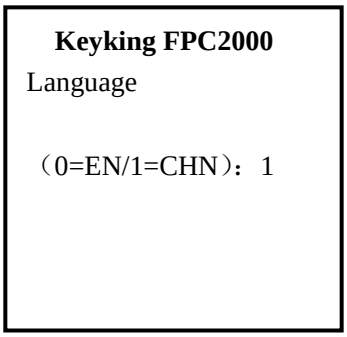
1. Press button Menu to enter manage menu FPC2000 is idle. In the following steps, Esc works as cancel while Enter works as confirm.

Keyking FPC2000
1. User
2. Network
3. Option
4. Device
5. Terminal Info

2. Press 3 to enter Option interface. (As shown below)

Keyking FPC2000
1. Language
2. Clock Setting
3. Screen Saver
4. Door Relay
5. MultiFP Verify
6. Tamper Alarm

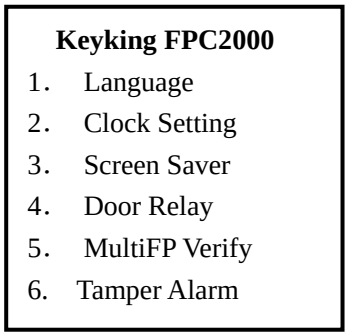
3. Press 1 to enter Language interface.(As shown below)



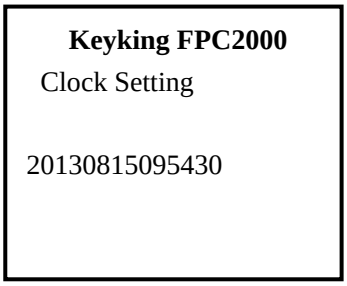
4. Press the corresponding number (0=English 1=Chinese) and press Enter to confirm.

3.3.2 Clock Setting

1. Enter the following interface referring to 3.3.1.



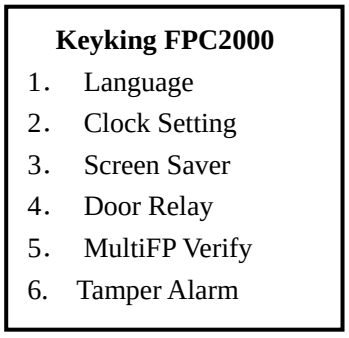
2. Press 2 to enter Clock Setting interface.(As shown below)



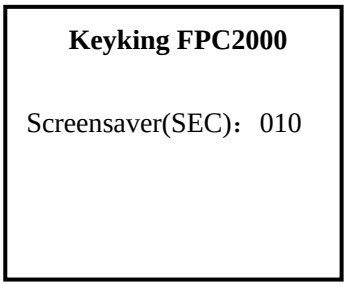
3. Input the accurate time and press Enter to confirm.

3.3.3 Screensaver

1. Enter the following interface referring to 3.3.1.



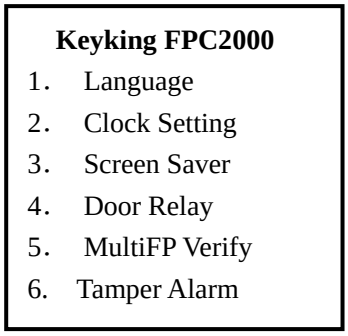
2. Press 3 to enter Screensaver interface.(As shown below)



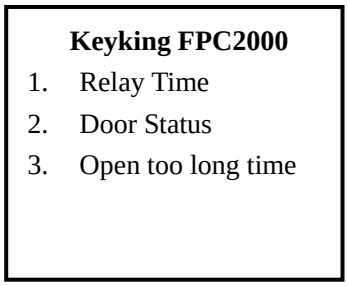
3. Input the interval time and press Enter to confirm.

3.3.4 Door Relay

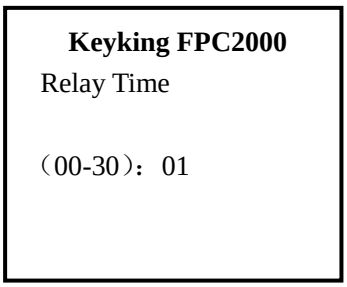
1. Enter the following interface referring to 3.3.1.

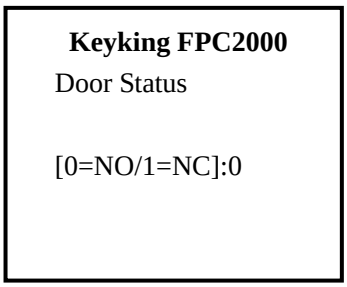


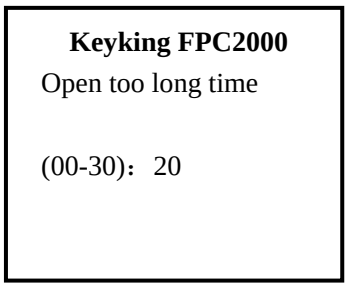
2. Press 4 to enter Screensaver interface. (As shown below)



3. Each interface is shown below.







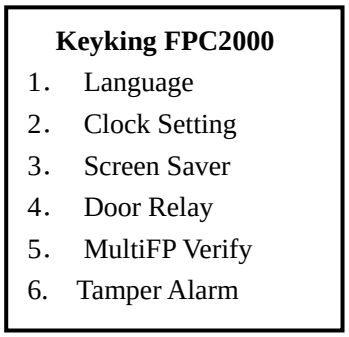
Relay Time：Relay activate time

Door Status：NO stands for Door normal open，NC stands for door normal close.

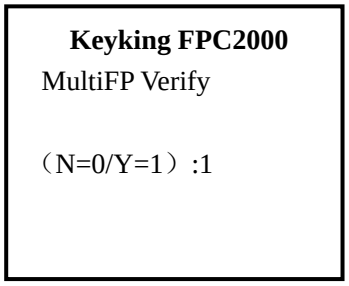
Open too long time： Interval time to alarm if door remains opened.

3.3.5 MultiFP Verify

1. Enter the following interface referring to 3.3.1.



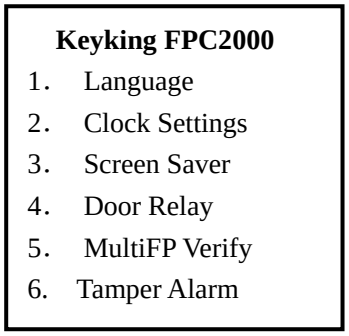
2. Press 5 to enter MultiFP Verify interface. (As shown below)



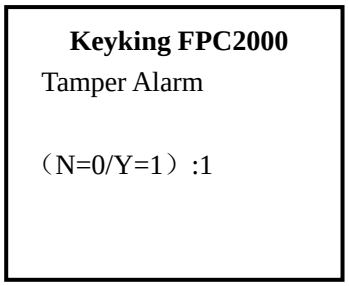
3. Press 0 stands for not to enable Multi FP Verify while 1 stands for affirmative. Press Enter to confirm.

3.3.6 Tamper Alarm

1. Enter the following interface referring to 3.3.1.



2. Press 6 to enter Tamper Alarm interface. (As shown below)



3. Press 0 stands for not to enable Tamper Alarm while 1 stands for affirmative. Press Enter to confirm.

3.4 Device

3.4.1 FP-Module

1. Press button Menu to enter manage menu FPC2000 is idle. In the following steps, Esc works as cancel while Enter works as confirm.

Keyking FPC2000
1. User
2. Network
3. Option
4. Device
5. Terminal Info

2. Press 4 to enter Device interface. (As shown below)

Keyking FPC2000
1. FP-Module
2. WG Setting
3. Card Number Mode
4. Display Mode
5. Terminal Init

3. Press 1 to enter FP-Module interface. (As shown below)

Keyking FPC2000
1. Level 1:1
2. Level 1:N
3. I-Capture
4. Auto Detect

4. Press the corresponding letter to enter each interface as shown.

Keyking FPC2000
Level 1:1

（1-9）：4

Keyking FPC2000
Level 1：N

（3-9）：5

Keyking FPC2000
I-Capture

（N=0/Y=1）：1

Keyking FPC2000
Auto Detect

（N=0/Y=1）：1

Level 1:1：Verify FP with all the registered FP, high level for high matching accuracy,

but will low down responding time.

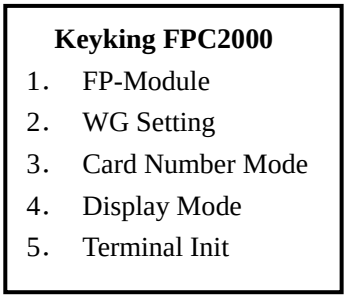
Level 1:N：Verify FP with all FP in the database, high level for high matching accuracy, but will low down responding time.

I-Capture：Press 1 to enable I-Capture, 0 to disable I-Capture.

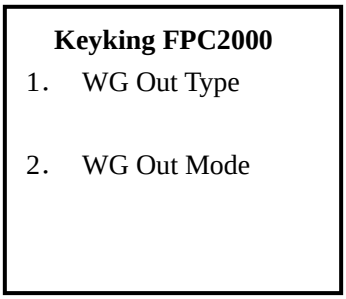
Auto Detect：Press 1 to enable I-Capture, 0 to disable I-Capture.

3.4.2 WG Setting

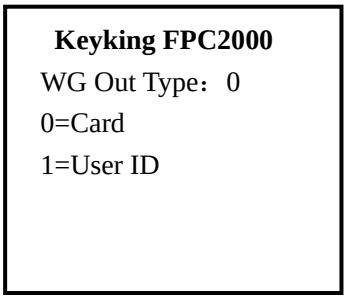
1. Enter the following interface referring to 3.4.1.

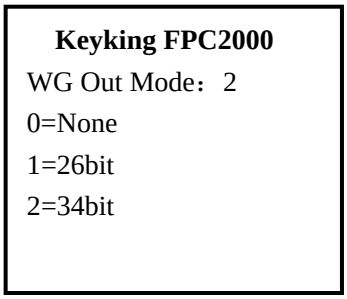


2. Press 2 to enter WG Setting interface. (As shown below)



3. Press the corresponding key to enter each interface as shown.





WG Out Type：Select the needed type by pressing the corresponding keys.

WG Out Mode：Select the needed type by pressing the corresponding keys.

3.4.3 Card Number Mode

1. Enter the following interface referring to 3.4.1.

Keyking FPC2000
1. FP-Module
2. WG Setting
3. Card Number Mode
4. Display Mode
5. Terminal Init

2. Press 3 to enter Card Number Mode interface. (As shown below)

Keyking FPC2000
Card Number Mode：2
0=Dec
1=Hex
2=Wiegand

3. Card number is displayed on the screen, Press Enter to confirm your choice after finishing selecting Card Number Mode.

3.4.4 Display Mode

1. Enter the following interface referring to 3.4.1.

Keyking FPC2000
1. FP-Module
2. WG Setting
3. Card Number Mode
4. Display Mode
5. Terminal Init

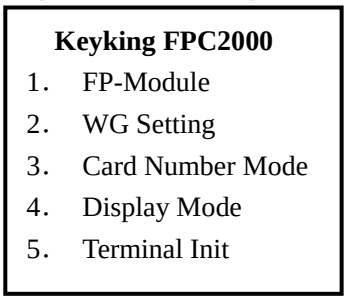
2. Press 4 to enter Display Mode interface. (As shown below)

Keyking FPC2000
Display Mode：3
0. None
1. User ID
2. UserName
3. UserName+UserID
4. CardNo
5. CardNo+UserID
6. CardNo+UserName
7. CardNo+Name+User ID

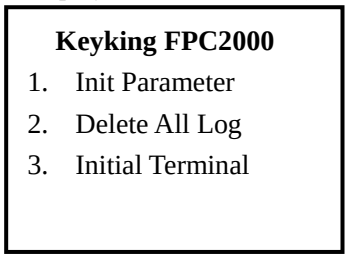
3. There are 5 options can be choose from, input the corresponding letter and press Enter to confirm.

3.4.5 Terminal Initialize

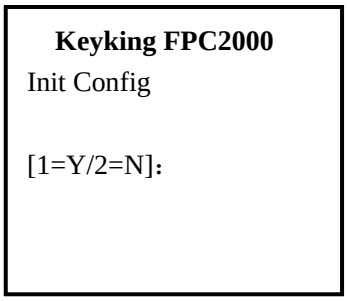
1. Enter the following interface referring to 3.4.1.

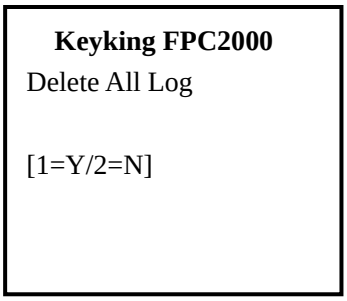


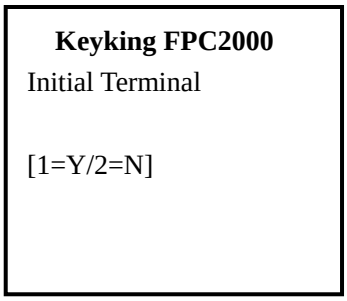
2. Press 5 to enter Display Mode interface. (As shown below)



3. Press the corresponding key to enter each interface as shown.







Init Parameter：Initialize all parameters

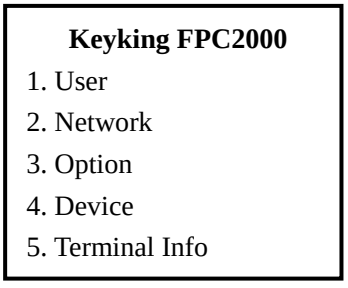
Delete All Log：Delete all personnel data, FP and attendance Log

Initial Terminal：Set terminal to defaulted status.

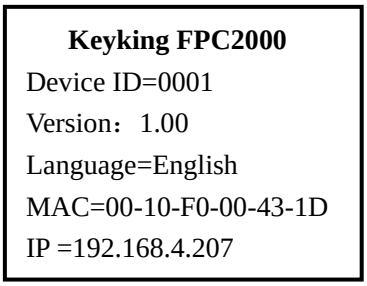
Note：Initial Terminal will clear all data in the device, please take a thorough consideration before operating.

3.4 Terminal Info

1. Press button Menu to enter manage menu FPC2000 is idle. In the following steps, Esc works as cancel while Enter works as confirm.



2. Press 5 to enter Terminal Info interface. (As shown below)



The screen will show the basic information of the device, such as Device ID, Version, Language, Mac Address and IP Address.

3.5 Door Open Mode

1 FP Mode

Application：Put your finger on the biometric reader of FPC2000, if verify passed, the screen will show that verify OK and display User ID, User Name and Card Number. Then the replay will response-door open. If verify failed, then FPC2000 will beep three sounds and display Please try again, door remains closed.

Note：Only the registered personnel can pass verifying.

2 FP/Card

Application：Flash a registered card or FP

FPC2000 can control a door by FP/Card

3 FP+Card

Application：Flash a registered card and FP.

Flash a registered card in front of FPC2000. (read range 3-10cm), FPC2000 will beep a long sound and then put your finger on the reader, if verify passed then door will open. The interval time between flashing card and verify FP is 8 seconds.

4 UserID+FP or UserID+Card

Application: Input your User ID by using the keypad and then verify your FP or flash your card to complete access process.

Chapter 4 Installation

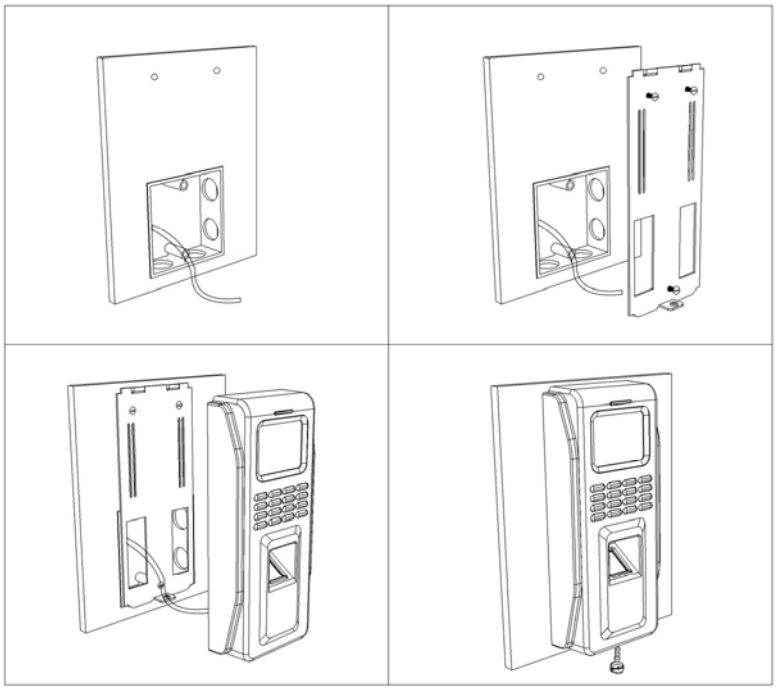
Steps:

4.1 In the Wall

1. Use installation box: Drill a hole on the wall (size:86x86mm) where you want to install your reader. Then install the installation box in the hole.

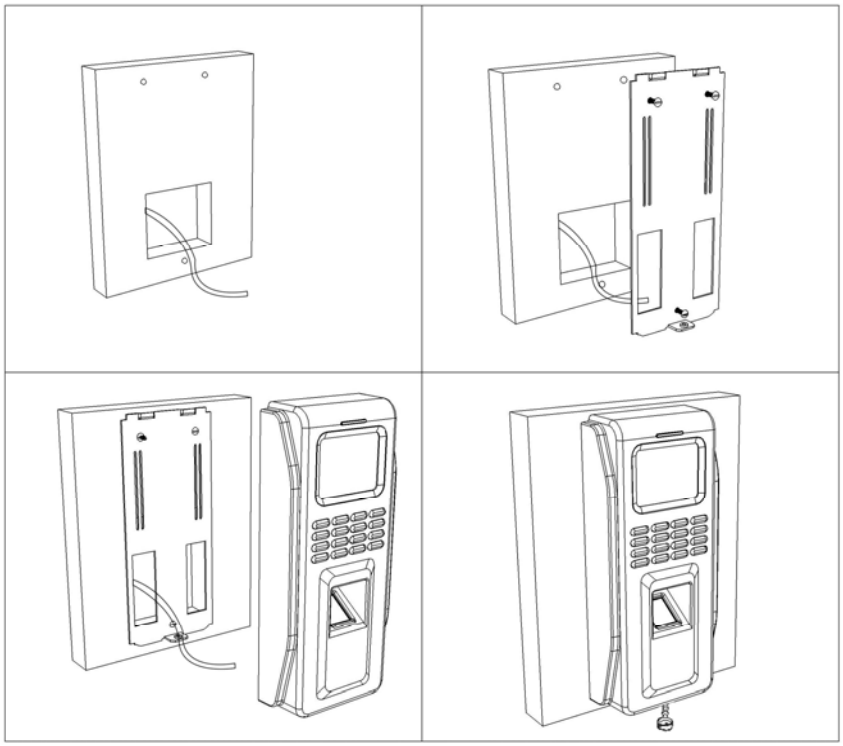
Installation box (Standard 86 box, single)

2. Wiring: Design the wiring between reader and controller, then process wiring.
3. Connection: Please refer to chapter 2 of the connections.
4. Fix base plate: Use a M4*30 screw to fix the bottom of the base plate on the installation box. Two ϕ6, deep 40mm holes should be drilled on the upper side, then slide two rubber plugs into the holes and fix the base plate with two ϕ4mm, 30mm screws.
5. The upper side of the FPC2000 should be fixed on the base plate first, then make the reader in vertical position and use a M3*4 screws to fix it.



4.2 Without Installation Box

1. Cut a square hole in the wall. Width 70mm Height 60mm.
2. Wiring: Design the wiring between reader and controller, then process wiring
3. Connection: Please refer to chapter 2 of the connections.
4. Fix base plate: First drill 3 Φ6, deep 40mm holes and put rubber plugs in. then make the reader in vertical position and use a M3*4 screws to fix it. If the reader is to install on metal frame, then please make sure the frame width Is above 90mm, next cut a square hole in the wall. Width 70mm Height 60mm, drill 3 Φ6, deep 40mm holes and tap them with M4 screw tap. Finally make the reader in vertical position and use a M3*4 screws to fix it.



Chapter 5 FAQ

NO	Descriptions	Solution
1	No response for flashing（indicator off，buzzer no beeping）	● Power problem（check power supply） ● Invalid card type（use supported card）
2	Door stays opened	● Set short relay responding time in manage menu
3	FP or card information missing	● Register FP/Card in PC.(Connect to PC first)
4	Can not open door by flashing card or FP.	● Device not power up（FPC2000、Lock） ● Invalid card/FP（register your card/FP） ● Door open mode (Set to Card or Card / FP)
5	Can not open the door when it's Card+FP mode	● Invalid card（register your card） ● Invalid FP（register your FP） ● Over interval time between flash card and verify FP.
6	Door bell not working	● No connected door bells ● Cable problem ● Faulty door bells
7	Wrong Time/Date	● Set Time/Date in manage menu.